

technical note

Title:	Kingsway House	Date Approved:	13/05/2020
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				For Information			
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Introduction

Kingsway House is an existing 9 storey (including lower ground floor) building located on the west side of the Kingsway between High Holborn and the Strand. It was constructed in approximately 1906-07.

The proposed development consists of the demolition of the existing 6th and 7th floors, the lift overrun and the plant room and their replacement with a double mansard roof, a set-back 8th floor and roof terrace above. The proposal also involves internal refurbishment works comprising removal of the internal structure to allow for the installation of a new RC frame with more efficient floor plates and core to provide an improved internal layout and additional floorspace.

Enabling Works

The existing footings to the wall along the party wall between Kingsway House and 62 Parker Street and 4 Great Queen Street are to be demolished and replaced with RC underpins which will form part of the proposed raft foundation. The new basement floor slab is to act as a raft foundation which will redistribute the concentrated loads from the new structural frame.

The underpins will form the basis of the enabling works package and are critical to ensure both the existing and new construction of the building is supported on a similar foundation system. Tying the underpins into the raft assists in distributing the new building loads which are concentrated around the perimeter of the floorplate whilst mitigating the risk of differential movements occurring between adjacent structures.

The underpinning works are required to be one of the first activities on site due to the time consuming process associated with their construction. The proposal to separate these works into an enabling package allows them to be removed from the critical path of the main contract and will eventually aid with logistics on a very confined site.

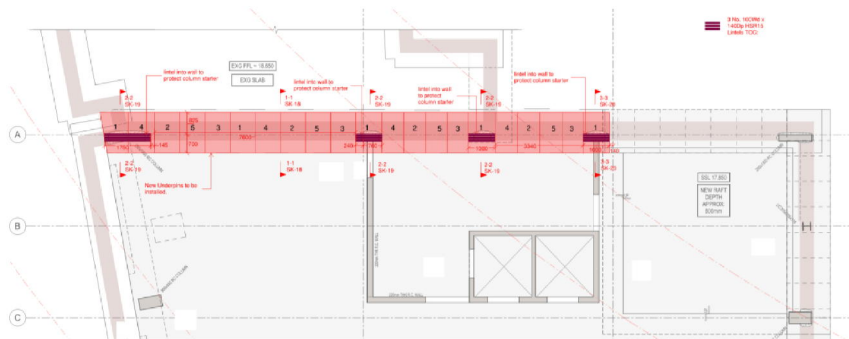


Figure 1 – Plan Location of Underpins

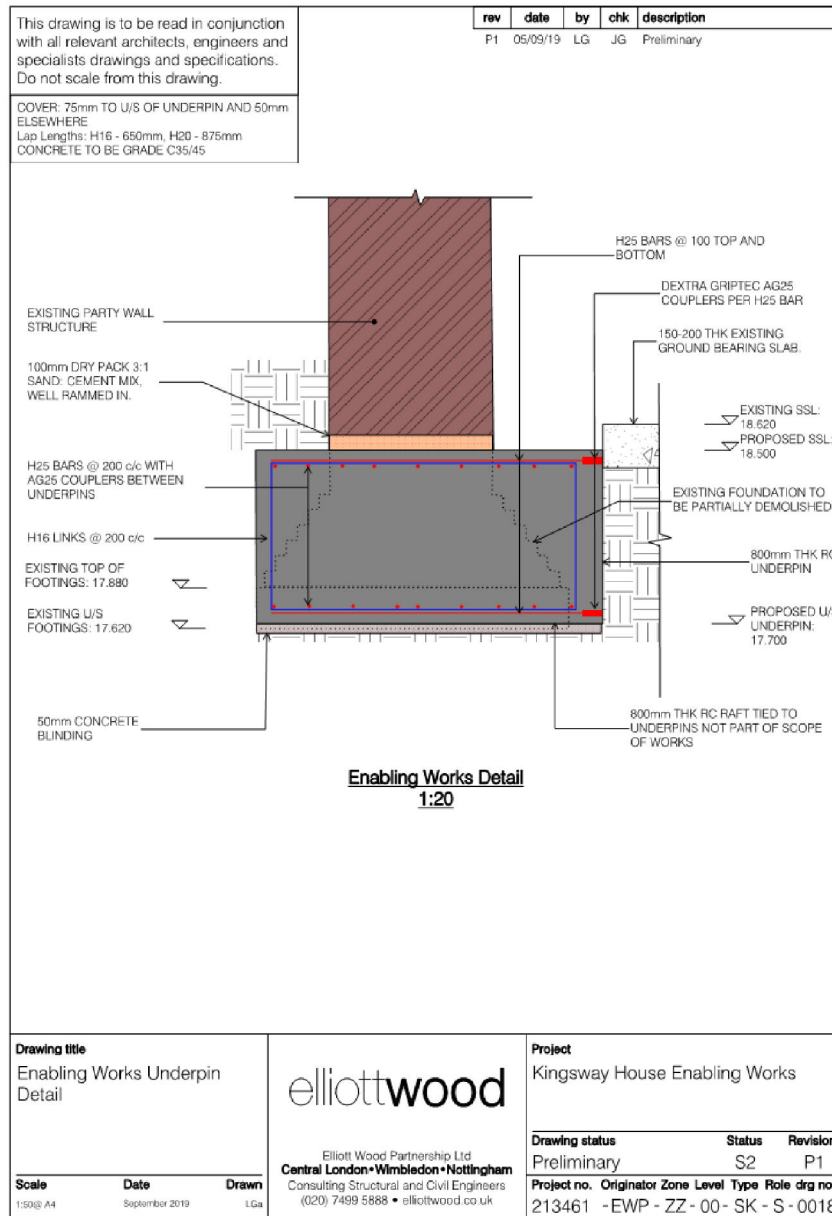


Figure 2 - Typical Underpin Detail